

Table 16
TMDL Summary for Burroughs Run

NPDES	Flow mgd	Waste Load Allocations												TMDL Percent Reduction			
		CBOD5 mg/L	NH3-N mg/L	TN mg/L	TP mg/L	DO mg/L	CBOD5 lb/day	NH3-N lb/day	TN lb/day	TP lb/day	DO lb/day	CBOD5 mg/L	NH3-N mg/L	TP mg/L			
PA0055425	0.0005	10.00	1.50	3.63	2.00	6.00	0.042	0.006	0.015	0.008	0.025	0.0%	0.0%	0.0%			
		Total Waste Load Allocation					0.042	0.006	0.015	0.008	0.025						
Load Allocations																	
Subwatershed	Flow cfs	CBOD5 mg/L	NH3-N mg/L	TN mg/L	TP mg/L	DO mg/L	CBOD5 lb/day	NH3-N lb/day	TN lb/day	TP lb/day	DO lb/day	TMDL Percent Reduction					
		0.85	1.00	0.02	1.98	0.05	7.34	4.585	0.092	9.078	0.206	33.652	0.0%	0.0%	0.0%		
Atm. Deposition								0.013	0.005	0.018	0.002						
		Total Load Allocation					4.598	0.097	9.096	0.208	33.652						

Table 17
TMDL Summary for Red Clay Creek West Branch

NPDES	Flow mgd	Waste Load Allocations												TMDL Percent Reduction			
		CBOD5 mg/L	NH3-N mg/L	TN mg/L	TP mg/L	DO mg/L	CBOD5 lb/day	NH3-N lb/day	TN lb/day	TP lb/day	DO lb/day	CBOD5 mg/L	NH3-N mg/L	TP mg/L			
PA0053554	0.0000	15.00	1.50	3.63	2.00	5.00	0.000	0.000	0.000	0.000	0.000	0.0%	0.0%	0.0%			
PA0024058	1.1000	16.63	2.00	4.83	1.28	6.00	152.679	18.362	44.344	11.752	55.086	33.5%	33.5%	82.9%			
PA0050679	0.2500	2.00	0.10	0.24	0.10	5.00	4.173	0.209	0.501	0.209	10.433	0.0%	0.0%	0.0%			
PA0057720-001	0.0500	9.50	1.90	4.60	1.90	5.00	3.965	0.793	1.920	0.793	2.087	5.0%	5.0%	5.0%			
PA0057720-002	0.0900	2.00	0.10	0.24	0.10	5.00	1.502	0.075	0.180	0.075	3.756	0.0%	0.0%	0.0%			
		Total Waste Load Allocation					162.319	19.439	46.945	12.828	71.361						
Load Allocations																	
Subwatershed	Flow cfs	CBOD5 mg/L	NH3-N mg/L	TN mg/L	TP mg/L	DO mg/L	CBOD5 lb/day	NH3-N lb/day	TN lb/day	TP lb/day	DO lb/day	TMDL Percent Reduction					
		3.71	1.00	0.020	1.98	0.045	7.34	20.009	0.400	39.618	0.900	146.869	0.0%	0.0%	0.0%		
Atm. Deposition								0.044	0.016	0.063	0.006						
		Total Load Allocation					20.053	0.416	39.681	0.906	146.869						

Table 18
TMDL Summary for Red Clay Creek Mainstem and East Branch

NPDES	Flow mgd	Waste Load Allocations												TMDL Percent Reduction			
		CBOD5 mg/L	NH3-N mg/L	TN mg/L	TP mg/L	DO lb/day	CBOD5 lb/day	NH3-N lb/day	TN lb/day	TP lb/day	DO lb/day	CBOD5	NH3-N	TP			
DE0000230	0.3500	7.00	0.10	0.24	0.10	5.00	20.449	0.292	0.701	0.292	14.606	0.0%	0.0%	0.0%			
DE0021709	0.0150	20.00	1.50	3.63	2.00	5.00	2.504	0.188	0.454	0.250	0.626	0.0%	0.0%	0.0%			
DE0050067	0.0015	30.00	1.50	3.63	2.00	5.00	0.376	0.019	0.045	0.025	0.063	0.0%	0.0%	0.0%			
DE0000451	2.1700	3.00	0.10	0.24	4.00	5.00	54.335	1.811	4.347	72.446	90.558	0.0%	0.0%	0.0%			
PA0055107	0.1500	25.00	2.00	4.84	2.00	5.00	31.299	2.504	6.059	2.504	6.260	0.0%	0.0%	0.0%			
PA0054755	0.0000	15.00	1.50	3.63	2.00	5.00	0.000	0.000	0.000	0.000	0.000	0.0%	0.0%	0.0%			
	Total Waste Load Allocation						108.961	4.814	11.607	75.518	112.112						
Load Allocations																	
Subwatershed	Flow cfs	CBOD5 mg/L	NH3-N mg/L	TN mg/L	TP mg/L	DO mg/L	CBOD5 lb/day	NH3-N lb/day	TN lb/day	TP lb/day	DO lb/day	TMDL Percent Reduction					
												CBOD5	NH3-N	TP			
		R02	1.39	1.00	0.020	1.98	0.045	7.34	7.500	0.150	14.851	0.338	55.052	0.0%	0.0%	0.0%	
R04	1.37	1.00	0.020	1.98	0.045	7.34	7.387	0.148	14.626	0.332	54.221	0.0%	0.0%	0.0%			
R05	3.62	1.00	0.020	1.98	0.045	7.34	19.530	0.391	38.669	0.879	143.349	0.0%	0.0%	0.0%			
HOOPES	1.00	1.00	0.020	1.98	0.045	7.30	5.394	0.108	10.681	0.243	39.379	0.0%	0.0%	0.0%			
Atm. Deposition							0.291	0.109	0.417	0.037							
	Total Load Allocation						40.103	0.905	79.244	1.829	292.001						

Table 19
TMDL Summary for the White Clay Creek Middle Branch

Waste Load Allocations														
NPDES	Flow	CBOD5	NH3-N	TN	TP	DO	CBOD5	NH3-N	TN	TP	DO	TMDL Percent Reduction		
	mgd	mg/L	mg/L	mg/L	mg/L	mg/L	lb/day	lb/day	lb/day	lb/day	lb/day	CBOD5	NH3-N	TP
PA0053783	0.0200	10.00	3.00	7.26	2.00	5.00	1.669	0.501	1.212	0.334	0.835	0.0%	0.0%	0.0%
PA0024066	0.2500	25.00	4.80	11.62	2.00	5.00	52.165	10.016	24.246	4.173	10.433	0.0%	0.0%	0.0%
Total Waste Load Allocation							53.834	10.516	25.458	4.507	11.268			
Load Allocations														
Subwatershed	Flow	CBOD5	NH3-N	TN	TP	DO	CBOD5	NH3-N	TN	TP	DO	TMDL Percent Reduction		
	cfs	mg/L	mg/L	mg/L	mg/L	mg/L	lb/day	lb/day	lb/day	lb/day	lb/day	CBOD5	NH3-N	TP
W01	2.35	0.64	0.02	1.79	0.02	7.34	8.114	0.254	22.694	0.254	93.059	0.0%	0.0%	0.0%
W02	3.66	0.64	0.02	1.79	0.02	7.34	12.634	0.395	35.337	0.395	144.901	0.0%	0.0%	0.0%
Atm. Deposition							0.054	0.020	0.078	0.007				
Total Load Allocation							20.803	0.668	58.109	0.655	237.960			

Table 20
TMDL Summary for the White Clay Creek East Branch

Waste Load Allocations														
NPDES	Flow	CBOD5	NH3-N	TN	TP	DO	CBOD5	NH3-N	TN	TP	DO	TMDL Percent Reduction		
	mgd	mg/L	mg/L	mg/L	mg/L	mg/L	lb/day	lb/day	lb/day	lb/day	lb/day	CBOD5	NH3-N	TP
PA0052451	0.0012	25.00	20.00	48.40	2.00	2.00	0.250	0.200	0.485	0.020	0.020	0.0%	0.0%	0.0%
PA0057029	0.1440	2.00	0.04	2.10	0.11	5.00	2.404	0.048	2.524	0.132	6.009	0.0%	0.0%	0.0%
PA0025488	0.3000	25.00	2.00	50.00	4.00	2.00	62.597	5.008	125.195	10.016	5.008	0.0%	0.0%	0.0%
PA0052019	0.0075	25.00	6.00	14.52	2.00	6.00	1.565	0.376	0.909	0.125	0.376	0.0%	0.0%	0.0%
PA0056898	0.0650	25.00	3.50	32.55	0.30	5.00	13.563	1.899	17.659	0.163	2.713	0.0%	0.0%	0.0%
PA0056952	0.0029	30.00	0.50	4.65	0.30	5.00	0.726	0.012	0.113	0.007	0.121	0.0%	0.0%	0.0%
PA0029343	0.0270	20.00	3.00	7.26	2.00	5.00	4.507	0.676	1.636	0.451	1.127	0.0%	0.0%	0.0%
PA0040436	0.0090	20.00	3.00	7.26	2.00	5.00	1.502	0.225	0.545	0.150	0.376	0.0%	0.0%	0.0%
PA0040665	0.0100	20.00	3.00	7.26	2.00	5.00	1.669	0.250	0.606	0.167	0.417	0.0%	0.0%	0.0%
Total Waste Load Allocation							88.784	8.694	149.671	11.231	16.166			
Load Allocations														
	Flow	CBOD5	NH3-N	TN	TP	DO	CBOD5	NH3-N	TN	TP	DO	TMDL Percent Reduction		

Subwatershed	cfs	mg/L	mg/L	mg/L	mg/L	mg/L	lb/day	lb/day	lb/day	lb/day	lb/day	CBOD5	NH3-N	TP
W03	4.32	0.64	0.020	1.79	0.020	7.34	14.913	0.466	41.710	0.466	171.033	0.0%	0.0%	0.0%
W04	2.44	0.64	0.020	1.79	0.020	7.34	8.425	0.263	23.564	0.263	96.627	0.0%	0.0%	0.0%
Atm. Deposition							0.099	0.037	0.141	0.013				
Total Load Allocation					23.437	0.766	65.415	0.742	267.660					

Table 21
TMDL Summary of Muddy Run

Subwatershed	Load Allocations												TMDL Percent Reduction		
	Flow mgd	CBOD5 mg/L	NH3-N mg/L	TN mg/L	TP mg/L	DO mg/L	CBOD5 lb/day	NH3-N lb/day	TN lb/day	TP lb/day	DO lb/day	CBOD5	NH3-N	TP	
W07	0.93	0.64	0.02	1.79	0.02	7.34	3.208	0.100	8.973	0.100	36.795	0.0%	0.0%	0.0%	
Atm. Deposition							0.017	0.006	0.024	0.002					
Total Load Allocation					3.225	0.106	8.997	0.102	36.795						

Table 22
TMDL Summary of Pike Creek

Subwatershed	Load Allocations												TMDL Percent Reduction		
	Flow mgd	CBOD5 mg/L	NH3-N mg/L	TN mg/L	TP mg/L	DO mg/L	CBOD5 lb/day	NH3-N lb/day	TN lb/day	TP lb/day	DO lb/day	CBOD5	NH3-N	TP	
W06	1.60	0.64	0.02	1.79	0.02	7.34	5.528	0.173	15.462	0.173	63.403	0.0%	0.0%	0.0%	
Atm. Deposition							0.039	0.015	0.056	0.005					
Total Load Allocation					5.567	0.188	15.518	0.178	63.403						

Table 23
TMDL Summary of Mill Creek

Subwatershed	Load Allocations												TMDL Percent Reduction				
	Flow mgd	CBOD5 mg/L	NH3-N mg/L	TN mg/L	TP mg/L	DO mg/L	CBOD5 lb/day	NH3-N lb/day	TN lb/day	TP lb/day	DO lb/day	CBOD5	NH3-N	TP			
W05	2.20	0.64	0.02	1.79	0.02	7.34	7.591	0.237	21.232	0.237	87.065	0.0%	0.0%	0.0%			
Atm. Deposition							0.051	0.019	0.073	0.007							
Total Load Allocation				7.642	0.256	21.305	0.244	87.065									

Table 24
TMDL Summary of White Clay Creek Mainstem

NPDES	Waste Load Allocations												TMDL Percent Reduction				
	Flow mgd	CBOD5 mg/L	NH3-N mg/L	TN mg/L	TP mg/L	DO mg/L	CBOD5 lb/day	NH3-N lb/day	TN lb/day	TP lb/day	DO lb/day	CBOD5	NH3-N	TP			
DE0000191	0.0300	3.00	0.10	0.24	0.10	5.00	0.751	0.025	0.060	0.025	1.252	0.0%	0.0%	0.0%			
Total Waste Load Allocation				0.751	0.025	0.060	0.025	1.252									
Subwatershed	Load Allocations												TMDL Percent Reduction				
	Flow cfs	CBOD5 mg/L	NH3-N mg/L	TN mg/L	TP mg/L	DO mg/L	CBOD5 lb/day	NH3-N lb/day	TN lb/day	TP lb/day	DO lb/day	CBOD5				NH3-N	TP
W08	1.72	0.64	0.02	1.79	0.02	7.34	5.938	0.186	16.609	0.186	68.107	0.0%	0.0%	0.0%			
W09	2.17	0.64	0.02	1.79	0.02	7.34	7.495	0.234	20.964	0.234	85.964	0.0%	0.0%	0.0%			
W10	1.21	0.64	0.02	1.79	0.02	7.34	4.177	0.131	11.684	0.131	47.910	0.0%	0.0%	0.0%			
Atm. Deposition							0.348	0.13	0.499	0.044							
Total Load Allocation				17.959	0.680	49.756	0.594	201.980									

Table 25
TMDL Summary for the Christina River West Branch

NPDES	Waste Load Allocations												TMDL Percent Reduction		
	Flow mgd	CBOD5 mg/L	NH3-N mg/L	TN mg/L	TP mg/L	DO mg/L	CBOD5 lb/day	NH3-N lb/day	TN lb/day	TP lb/day	DO lb/day	CBOD5	NH3-N	TP	
	MD0022641*	0.7000	12.22	2.00	20.00	1.00	6.00	71.395	11.685	117.0	5.842	35.055	0.0%	69.0%	0.0%
MD0065145*	0.0500	10.00	4.52	20.00	1.00	6.00	4.173	1.886	8.33	0.417	2.504	0.0%	0.0%	0.0%	0.0%
	Total Waste Load Allocation					75.568	13.571	125.33	6.260	37.558					
Load Allocations															
Subwatershed	Flow cfs	CBOD5 mg/L	NH3-N mg/L	TN mg/L	TP mg/L	DO mg/L	CBOD5 lb/day	NH3-N lb/day	TN lb/day	TP lb/day	DO lb/day	TMDL Percent Reduction			
	C01WB	0.15	1.43	0.02	1.00	0.02	7.34	1.158	0.016	0.810	0.016	5.943	0.0%	0.0%	0.0%
	Atm. Deposition							0.008	0.003	0.011	0.001				
	Total Load Allocation					1.166	0.019	0.821	0.017	5.943					

* - the equivalent BOD5 values are: MD0022641 - 128.4 lbs/day and MD0065145 - 6.3 lbs/day; total BOD5 waste load allocation of 134.7 lbs/day. There are no BOD5 reductions at these facilities recommended by this TMDL.

Table 26
TMDL Summary for Little Mill Creek

NPDES	Waste Load Allocations												TMDL Percent Reduction		
	Flow mgd	CBOD5 mg/L	NH3-N mg/L	TN mg/L	TP mg/L	DO mg/L	CBOD5 lb/day	NH3-N lb/day	TN lb/day	TP lb/day	DO lb/day	CBOD5	NH3-N	TP	
	DE0000523	0.0000	20.00	1.50	3.63	2.00	5.00	0.000	0.000	0.000	0.000	0.000	0.0%	0.0%	0.0%
DE0000566	0.0000	20.00	1.50	3.63	2.00	5.00	0.000	0.000	0.000	0.000	0.000	0.0%	0.0%	0.0%	0.0%
	Total Waste Load Allocation						0.000	0.000	0.000	0.000	0.000				
Load Allocations															
Subwatershed	Flow cfs	CBOD5 mg/L	NH3-N mg/L	TN mg/L	TP mg/L	DO mg/L	CBOD5 lb/day	NH3-N lb/day	TN lb/day	TP lb/day	DO lb/day	TMDL Percent Reduction			
	C04	4.70	1.43	0.02	1.00	0.02	7.34	36.241	0.507	25.343	0.507	186.020	0.0%	0.0%	0.0%

Atm. Deposition						0.028	0.011	0.041	0.004				
	Total Load Allocation					36.269	0.518	25.384	0.511	186.020			

Table 27
TMDL Summary of the Christina River Main Stem

Waste Load Allocations														
NPDES	Flow	CBOD5	NH3-N	TN	TP	DO	CBOD5	NH3-N	TN	TP	DO	TMDL Percent Reduction		
	mgd	mg/L	mg/L	mg/L	mg/L	mg/L	lb/day	lb/day	lb/day	lb/day	lb/day	CBOD5	NH3-N	TP
DE0000400	0.0000	2.00	0.10	0.24	0.10	5.00	0.000	0.000	0.000	0.000	0.000	0.0%	0.0%	0.0%
DE0051004	0.0000	15.00	1.50	3.63	2.00	5.00	0.000	0.000	0.000	0.000	0.000	0.0%	0.0%	0.0%
	Total Waste Load Allocation						0.000	0.000	0.000	0.000	0.000			
Load Allocations														
Subwatershed	Flow	CBOD5	NH3-N	TN	TP	DO	CBOD5	NH3-N	TN	TP	DO	TMDL Percent Reduction		
	cfs	mg/L	mg/L	mg/L	mg/L	mg/L	lb/day	lb/day	lb/day	lb/day	lb/day	CBOD5	NH3-N	TP
C01	0.60	1.43	0.02	1.00	0.02	7.34	4.625	0.065	3.234	0.065	23.741	0.0%	0.0%	0.0%
C02	0.65	1.43	0.02	1.00	0.02	7.34	5.016	0.070	3.508	0.070	25.748	0.0%	0.0%	0.0%
C03	0.48	1.43	0.02	1.00	0.02	7.34	3.700	0.052	2.588	0.052	18.994	0.0%	0.0%	0.0%
C05	0.80	1.43	0.02	1.00	0.02	7.34	6.165	0.086	4.311	0.086	31.644	0.0%	0.0%	0.0%
C06	1.59	1.43	0.02	1.00	0.02	7.34	12.265	0.172	8.577	0.172	62.956	0.0%	0.0%	0.0%
Atm. Deposition							3.222	1.207	4.630	0.412				
	Total Load Allocation						34.994	1.651	26.848	0.856	163.083			